GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:116
ANSWERED ON:21.07.2015
Research by ICAR
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Will the Minister of AGRICULTURE be pleased to state:

(a) whether Indian Council of Agricultural Research (ICAR) has conducted basic and strategic research relating to crop improvement and production in the country to achieve higher agricultural productivity;

(b) if so, the details thereof along with the details of the development and research activities carried out by the ICAR during the last three years and the current years along with the details of the other agencies involved in planning, research and development activities;

(c) the steps taken by the Government to ensure that the benefits of successful experiments conducted by the research institutions reach the farmers at the grassroot level;

(d) the details of the crops for which such technique/research are being used along with the details of the production increased as a result thereof; and

(e) whether the States are being provided with necessary technical and financial support for creation of agriculture infrastructure for optimal use of water and other natural resources, if so, the details thereof?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE
(DR. SANJEEV KUMAR BALYAN)

(a) Yes, Madam. ICAR has conducted basic and strategic research relating to crop improvement and production in the country with an approximate sanctioned funding of Rs.177.18 crores involving 42 consortia in last 4 years, spread across the country to achieve higher agricultural productivity.

(b) The Indian Council of Agricultural Research (ICAR) conducts basic and strategic research related to improvement and production of rice, wheat, maize, millets, fodder crops, oilseeds, pulses, sugarcane, cotton and other fiber crops through 26 commodity/theme based research institutes and 33 All India Coordinated Research Projects (AICRPs) and All India Network Projects (AINPs), mostly situated in State Agricultural Universities (SAUs) to develop location specific crop varieties and matching technologies as per the agro-ecological needs.

The crop improvement programmes have given emphasis on development of new crop varieties/hybrids with improved quality and tolerance/resistance to biotic and abiotic stresses and making crops able to withstand the weather extremities. The recent achievements in the field of sequencing of genomes of important plants and microbes have been gainfully utilized. Targeted integration of economically important genes through structural and functional genomics/molecular breeding have been strengthened. The traits of higher harvest index and partitioning for better economic yield have been targeted in development of high yielding varieties of rice, wheat, chickpea, pigeonpea and mustard crops. Concerted efforts to expand the hybrid technology in rice, mustard, pigeonpea, maize are being pursued to break the yield barrier through hybrid vigour.

Details of the basic and strategic research activities along with other agencies involved are enclosed in Annexure-I.

(c) The efforts of National Agriculture Research System (NARS) comprising of ICAR and SAUs have resulted in the release of 390 high yielding varieties/hybrids of different crops including 241 of cereals, 58 of oilseeds, 47 of pulses, 16 of fibres and 14 each of forages and sugarcane with fair degree of tolerance to biotic and abiotic stresses during the last three years and the current year (2012-2015) as given in Annexure II. Breeder seed of improved varieties, as per the indent of DAC, were also produced for their multiplication into certified seed so as to ensure the supply of quality seed to the farmers to boost the crop productivity and production. During the last three years, about 2.67 lakh quintal breeder seed of different crop varieties were produced as given in Annexure III. Besides, the improved varieties and production technologies were demonstrated at the farmers' fields by the ICAR institutes, State Agricultural Universities (SAUs) and Krishi Vigyan Kendras (KVKs) through frontline demonstrations (FLD) programme to create awareness among the farmers about them.

To bridge the gap between the technologies developed at the research institutes and to facilitate the efforts of the main extension system, the Indian Council of Agricultural Research has established a network of 642 Krishi Vigyan Kendras (KVKs) in the country The KVKs take up a number of activities for assessment, refinement and demonstration of technology/product and its dissemination through a number of extension programmes. The activities and programmes of KVKs include testing and demonstration of agriculture technologies in farmers field; training of farmers and extension personnel; and creation of awareness on improved technology through various extension programmes. During the last year, 5.55 lakh extension programmes/activities in the form of advisory services,

diagnostic and clinic services, exhibitions, exposure visits, ex-trainees sammelan, farm science club, conveners' meet, farmers' seminar, farmers' visit to KVK, field days, film shows, group meetings, Kisan ghosthi, Kisan melas, lectures delivered as resource persons, mahila mandals conveners' meetings, method demonstrations, plant/animal health camps, scientists' visit to farmer's field, self help group meetings, soil health camps, workshops and others were organized which attracted the participation of 91.47 lakh participants of which 87.77 lakh were farmers and 3.70 lakh extension personnel. The KVKs also organized 1.33 lakh extension programmes through TV programmes, radio talks, CDs/DVDs, extension literature, newspaper coverage, popular articles, leaflets, folders and books/booklets.

(d) The ICAR along with other Govt organizations like SAUs, DBT, DST, DAC, etc. provided support for ad-hoc/regular projects to boost crop research and development of improved varieties and technologies to ensure higher crop productivity. As a result of continuous technological backstopping, India could achieve an impressive production of about 265 million tonnes (mt) of food grains in 2013-14 including 106.6 mt of rice, 95.8 mt of wheat, 43.3 mt of coarse cereals and 19.2 mt of pulses. A record production of 32.7 mt of oilseeds including 30.9 mt of edible type, besides 352 mt of sugarcane and 359 lakh bales of cotton has also been achieved during the year.

(e) The DARE/ICAR only provides the technological backstopping through the network of 100 research institutes, 8 Zonal Project Directorate and 642 KVKs. The financial support to the States does not come under the purview of the DARE/ICAR.

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